- (Currently amended) A composition comprising a metallic surface, <u>said surface comprising</u>:

 a) a self-assembled monolayer (SAM) forming species comprising a capture probe, wherein said capture probe comprises a nucleic acid; and,
 - b) an asymmetric monolayer forming species having the formula:

wherein

A is an attachment linker moiety selected from the group consisting of sulfur and phosphonate;

MFS is a monolayer forming species selected from the group consisting of conductive oligomers and insulators;

AG is an electroconduit forming species and,

wherein MFS and AG are different.

- 2. (Original) A composition according to claim 1 wherein A is sulfur.
- 3. (Original) A composition according to claim 1 wherein said metallic surface is gold.
- 4. (Original) A composition according to claim 1 wherein said MFS is an insulator.
- 5. (Currently amended) A composition according to claim 4 wherein said insulator comprises an alkyl group from about 7 to 20 carbons.
- 6. (Original) A composition according to claim 5 wherein said alkyl group comprises a heteroalkyl.
- 7. (Original) A composition according to claim 5 wherein said alkyl group comprises a substituted alkyl.

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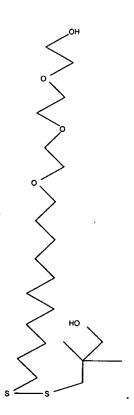
wherein

R₁ through R₃ are <u>each</u>, independently <u>from the others</u>, selected from the group consisting of hydrogen, alkyl, aryl, alcohol, amine, amido, nitro, ether, ester, ketone, imino, aldehyde, alkoxy, carbonyl, halogen, sulfur containing moiety and phosphorus containing moiety.

10. (Original) A composition according to claim 9 wherein said AG is attached to said attachment linker via a $(CH_2)_n$ group, wherein n is an integer from 0 to 4.

11. (Original) A composition according to claim 9 wherein said AG is attached directly to said attachment linker.

45. (Previously added) A composition according to claim 1, said asymmetric monolayer forming species having the formula:



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- 46. (New) A composition according to claim 1, wherein said SAM forming species is an insulator.
- 47. (New) A composition according to claim 45, wherein said insulator comprises an alkyl group from 7 to 20 carbons.